

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW051719\  
 Data File : VW010438.D  
 Acq On : 18 May 2019 04:34  
 Operator : SY/VA  
 Sample : K2906-03  
 Misc : 5.65G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 FESB-09(4-4.5)

Quant Time: May 18 05:08:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W051719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat May 18 01:59:40 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 643008   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 1248940  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 1095801  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 463124   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.30  | 65   | 410932   | 58.27 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 116.54% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 399885   | 51.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.68% |          |
| 50) Toluene-d8              | 10.32 | 98   | 1524850  | 53.01 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.02% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 570016   | 50.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.94% |          |

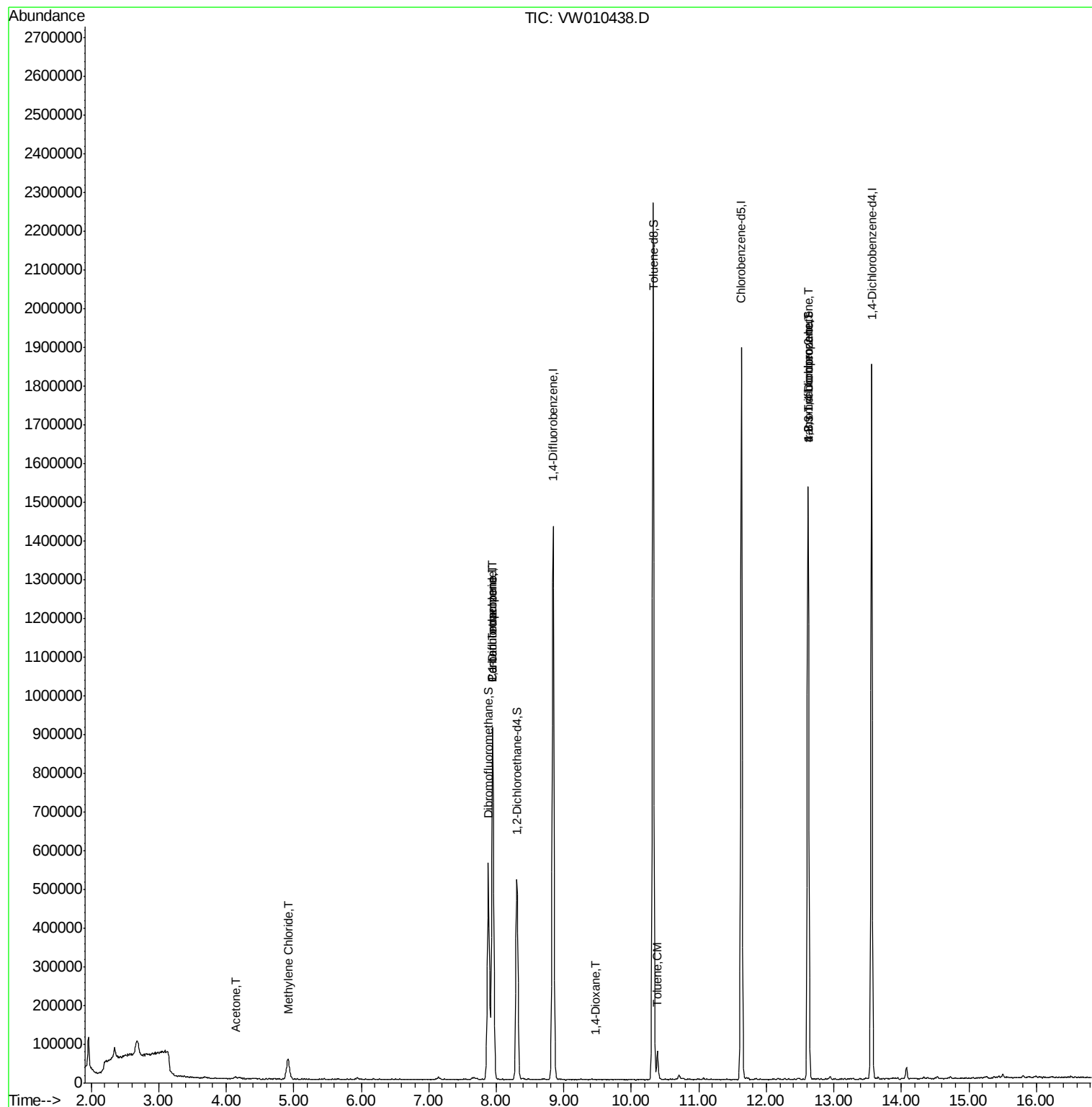
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 351      | Below Cal | #      | 42     |
| 3) Chloromethane               | 2.20  | 50   | 1398     | Below Cal | #      | 86     |
| 5) Bromomethane                | 2.76  | 94   | 894      | Below Cal | #      | 2      |
| 13) Acrolein                   | 3.90  | 56   | 319      | Below Cal | #      | 1      |
| 16) Acetone                    | 4.14  | 43   | 7418     | 5.972     | ug/l # | 87     |
| 20) Methylene Chloride         | 4.92  | 84   | 44648    | 3.274     | ug/l   | 98     |
| 31) Cyclohexane                | 7.95  | 56   | 14709    | Below Cal | #      | 8      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 55545    | 5.024     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 70907    | 5.942     | ug/l # | 15     |
| 49) 1,4-Dioxane                | 9.48  | 88   | 86       | 1.273     | ug/l # | 1      |
| 52) Toluene                    | 10.39 | 92   | 30612    | 1.461     | ug/l   | 99     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 277446   | 55.945    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 277446   | 110.399   | ug/l # | 14     |

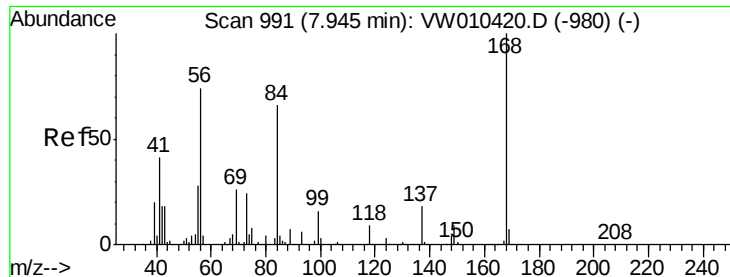
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Sat May 18 01:59:40 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

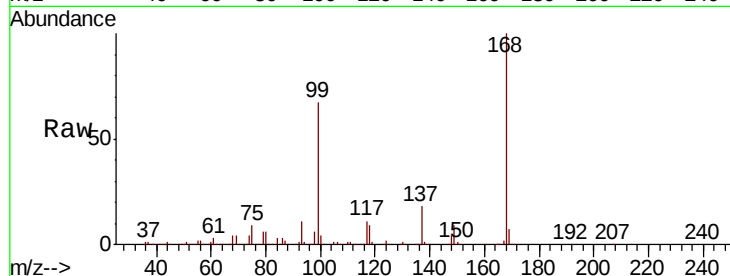
FESB-09(4-4.5)

Tgt Ion:168 Resp: 643008

Ion Ratio Lower Upper

168 100

99 67.3 50.8 76.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

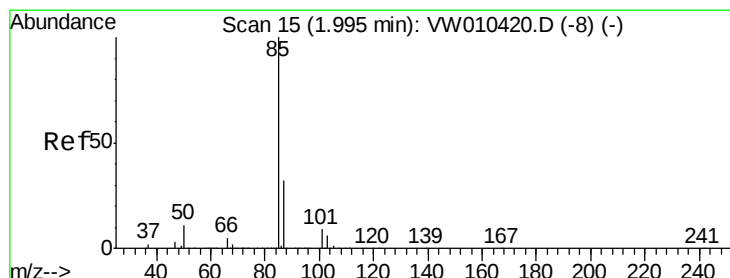
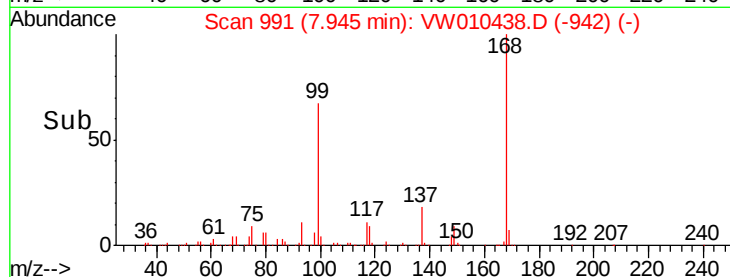
300000

200000

100000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 14

Delta R.T. -0.01 min

Lab File: VW010438.D

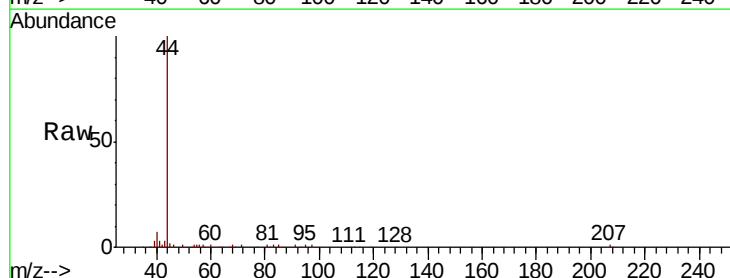
Acq: 18 May 2019 04:34

Tgt Ion: 85 Resp: 351

Ion Ratio Lower Upper

85 100

87 0.0 16.2 48.5#



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW

1.99

400

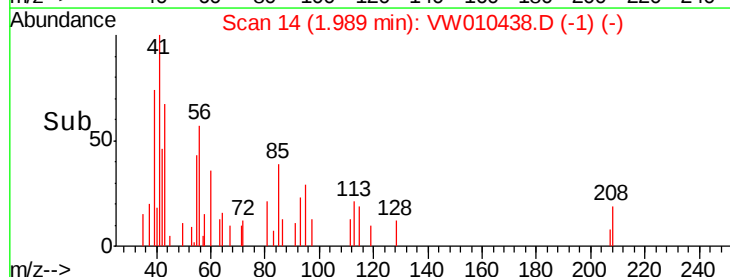
300

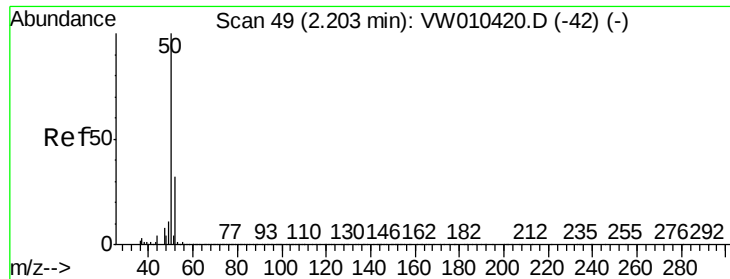
200

100

0

Time-->





#3

Chloromethane

Concen: Below Cal

RT: 2.20 min Scan# 49

Delta R.T. 0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

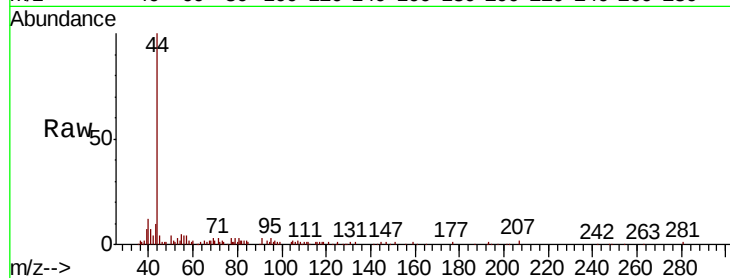
FESB-09(4-4.5)

Tgt Ion: 50 Resp: 1398

Ion Ratio Lower Upper

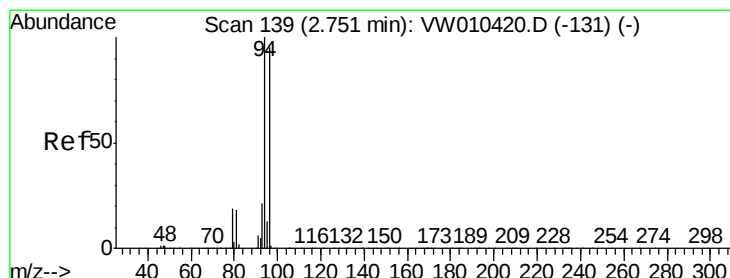
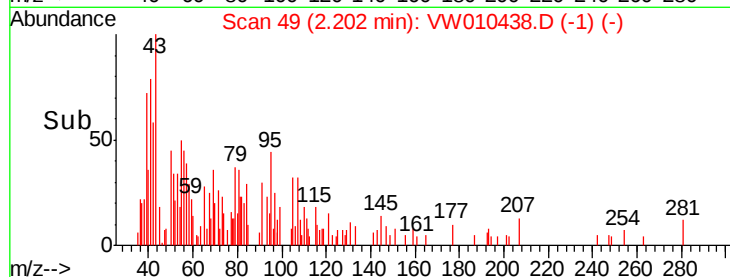
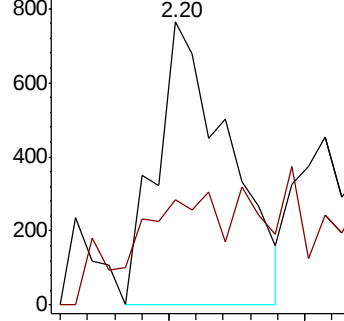
50 100

52 23.9 25.4 38.0#



Abundance Ion 49.90 (49.60 to 50.60): VW

Ion 51.90 (51.60 to 52.60): VW



#5

Bromomethane

Concen: Below Cal

RT: 2.76 min Scan# 141

Delta R.T. 0.01 min

Lab File: VW010438.D

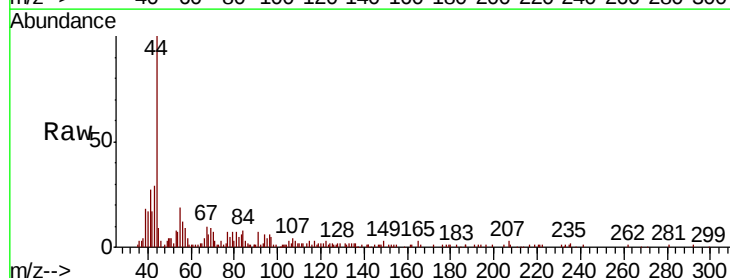
Acq: 18 May 2019 04:34

Tgt Ion: 94 Resp: 894

Ion Ratio Lower Upper

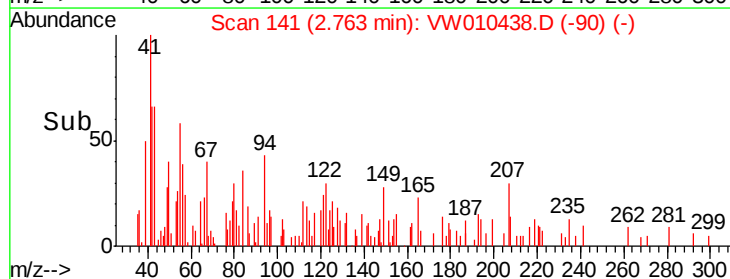
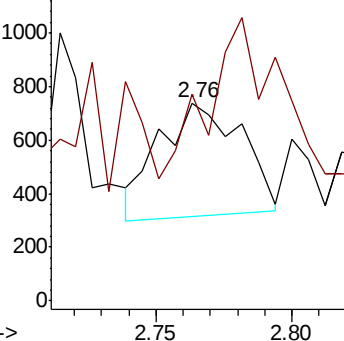
94 100

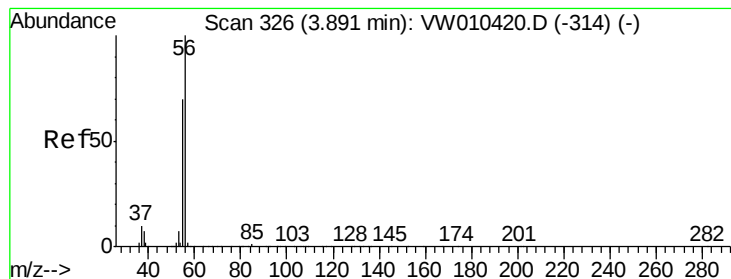
96 0.0 75.8 113.6#



Abundance Ion 93.90 (93.60 to 94.60): VW

Ion 95.90 (95.60 to 96.60): VW





#13

Acrolein

Concen: Below Cal

RT: 3.90 min Scan# 327

Delta R.T. 0.01 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

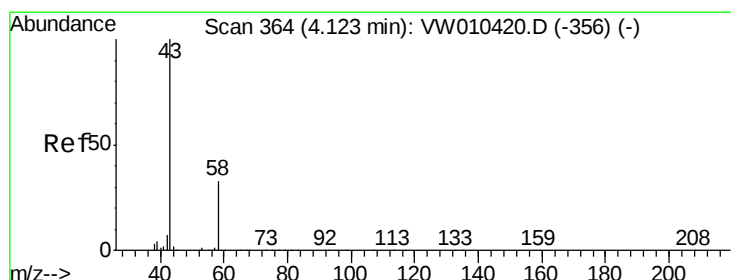
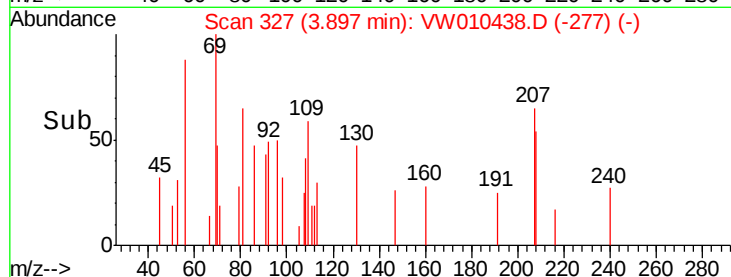
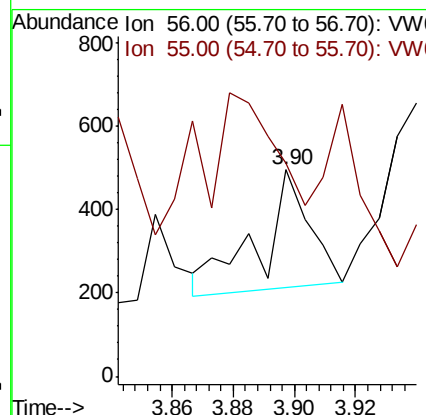
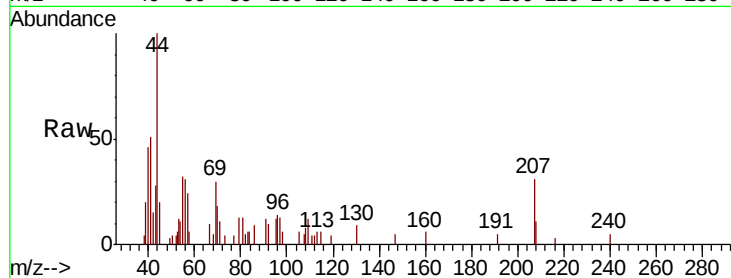
FESB-09(4-4.5)

Tgt Ion: 56 Resp: 319

Ion Ratio Lower Upper

56 100

55 185.0 57.6 86.4#



#16

Acetone

Concen: 5.972 ug/l

RT: 4.14 min Scan# 367

Delta R.T. 0.02 min

Lab File: VW010438.D

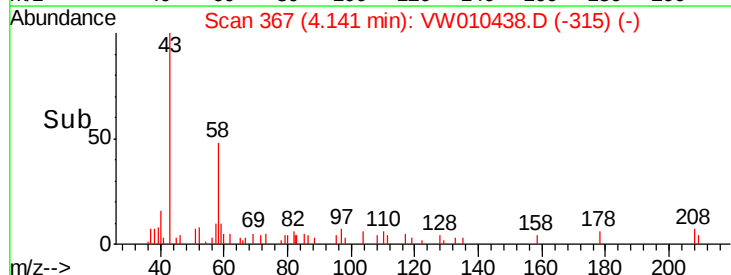
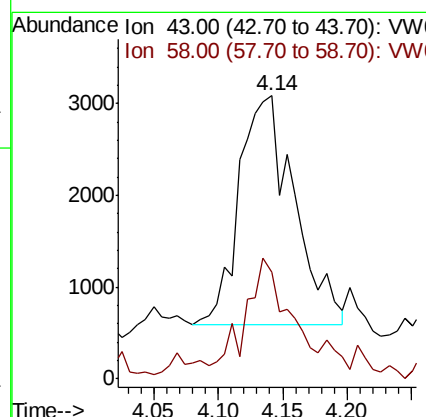
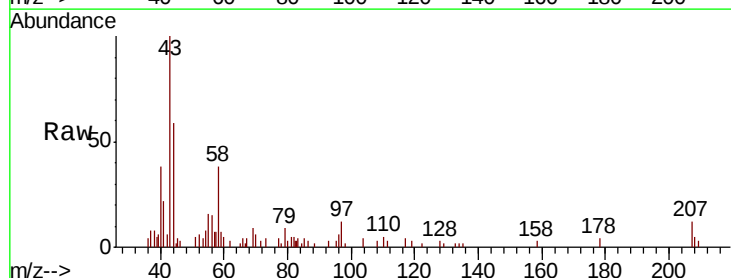
Acq: 18 May 2019 04:34

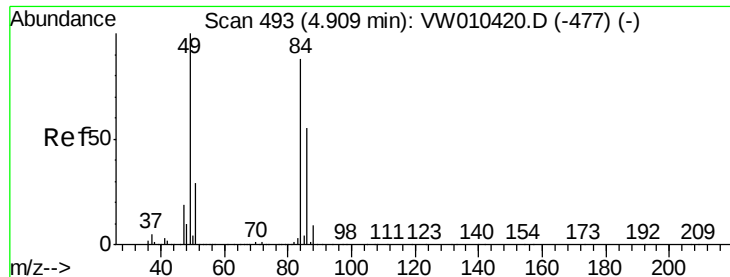
Tgt Ion: 43 Resp: 7418

Ion Ratio Lower Upper

43 100

58 39.8 26.0 39.0#





#20

Methylene Chloride

Concen: 3.274 ug/l

RT: 4.92 min Scan# 494

Delta R.T. 0.01 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

Tgt Ion: 84 Resp: 44648

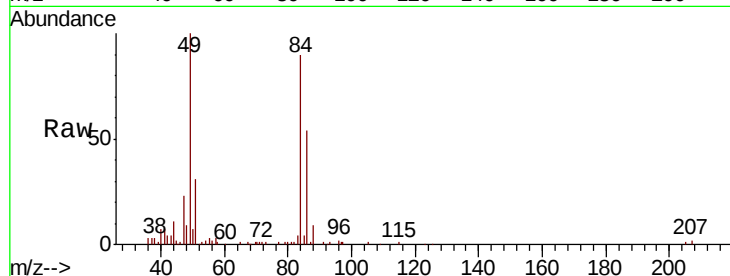
Ion Ratio Lower Upper

84 100

49 110.6 90.6 135.8

51 34.4 26.6 40.0

86 60.5 49.7 74.5

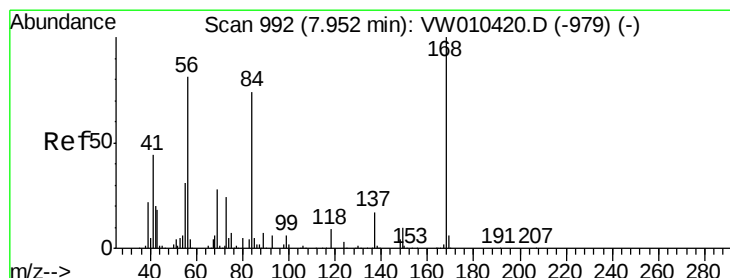
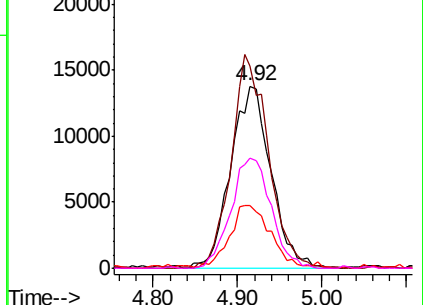
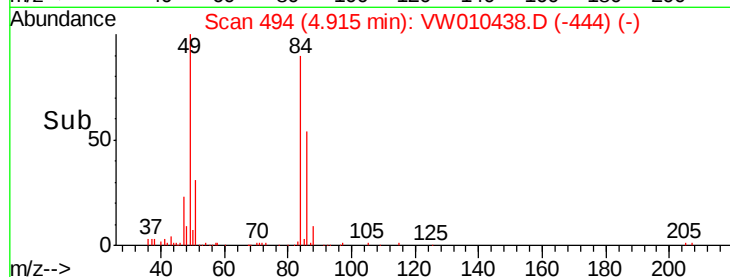


Abundance Ion 83.90 (83.60 to 84.60): VW

Ion 48.90 (48.60 to 49.60): VW

Ion 50.90 (50.60 to 51.60): VW

Ion 85.90 (85.60 to 86.60): VW



#31

Cyclohexane

Concen: Below Cal

RT: 7.95 min Scan# 992

Delta R.T. 0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

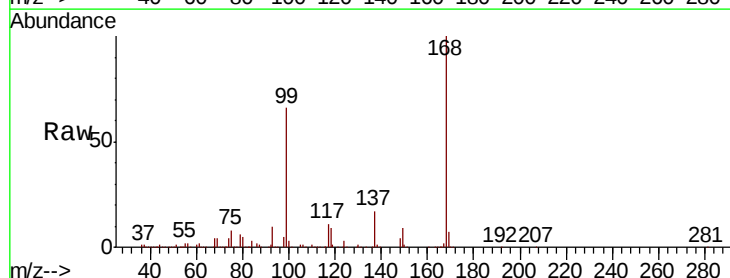
Tgt Ion: 56 Resp: 14709

Ion Ratio Lower Upper

56 100

69 164.4 27.6 41.4#

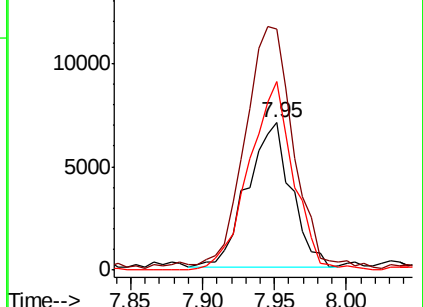
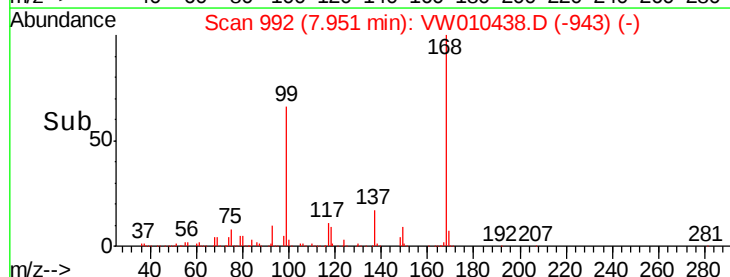
84 131.0 72.9 109.3#

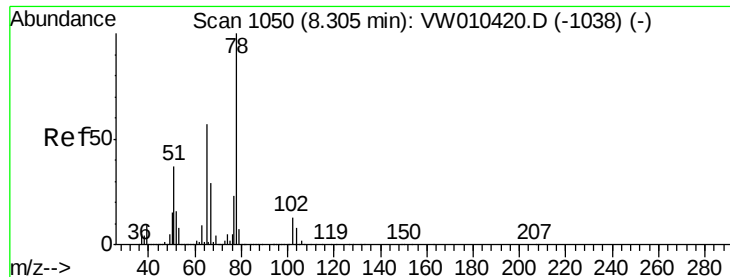


Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 69.00 (68.70 to 69.70): VW

Ion 84.00 (83.70 to 84.70): VW

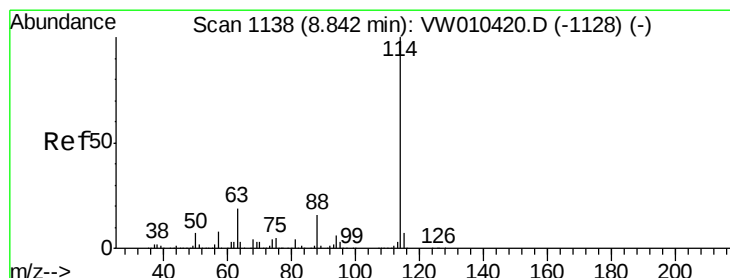
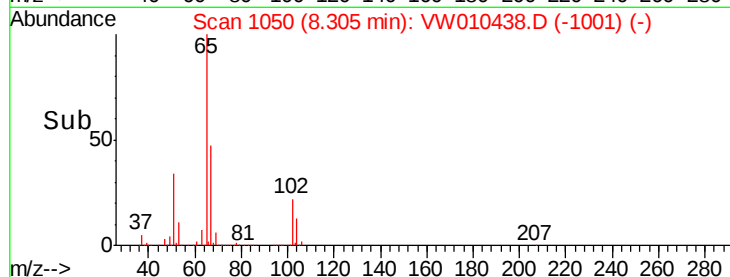
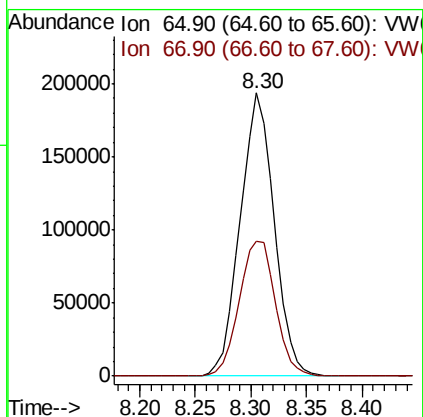
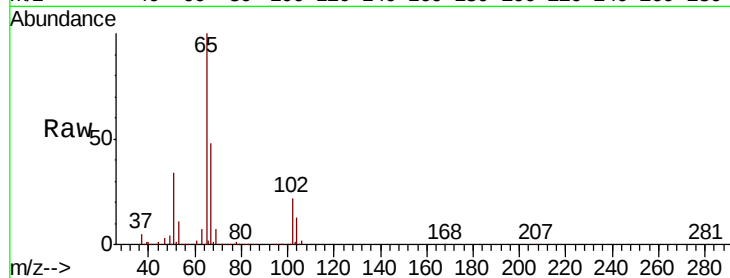




#33  
 1,2-Dichloroethane-d4  
 Concen: 58.272 ug/l  
 RT: 8.30 min Scan# 1050  
 Delta R.T. -0.00 min  
 Lab File: VW010438.D  
 Acq: 18 May 2019 04:34

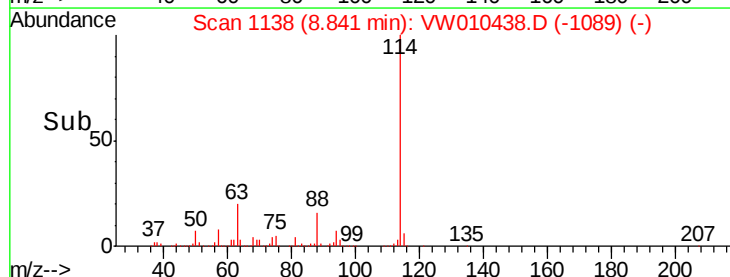
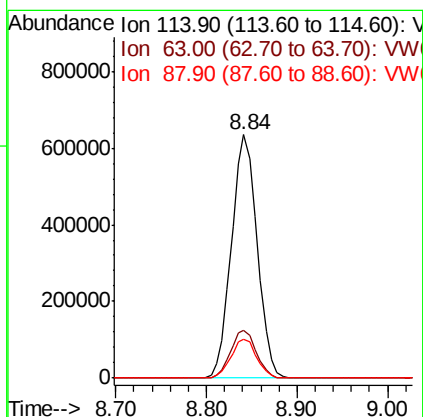
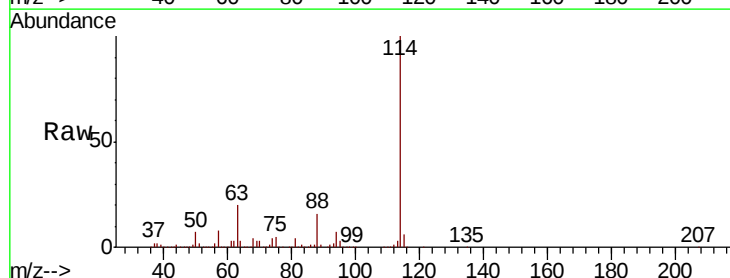
Instrument :  
 MSVOA\_W  
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 FESB-09(4-4.5)

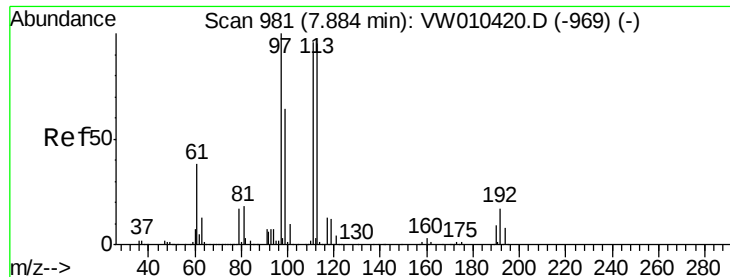
Tgt Ion: 65 Resp: 410932  
 Ion Ratio Lower Upper  
 65 100  
 67 51.1 0.0 104.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW010438.D  
 Acq: 18 May 2019 04:34

Tgt Ion: 114 Resp: 1248940  
 Ion Ratio Lower Upper  
 114 100  
 63 19.6 0.0 38.8  
 88 16.0 0.0 31.6





#35

Dibromofluoromethane

Concen: 51.840 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

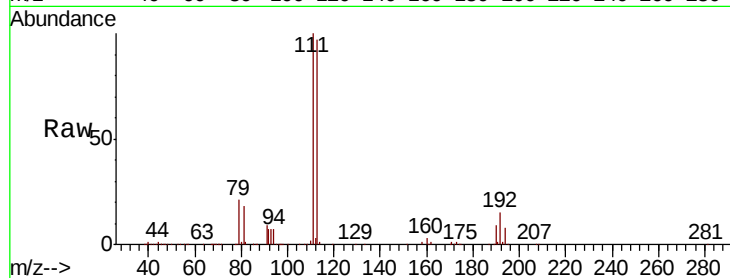
Tgt Ion:113 Resp: 399885

Ion Ratio Lower Upper

113 100

111 102.6 82.5 123.7

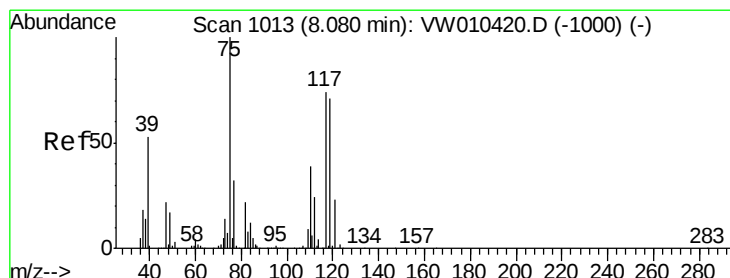
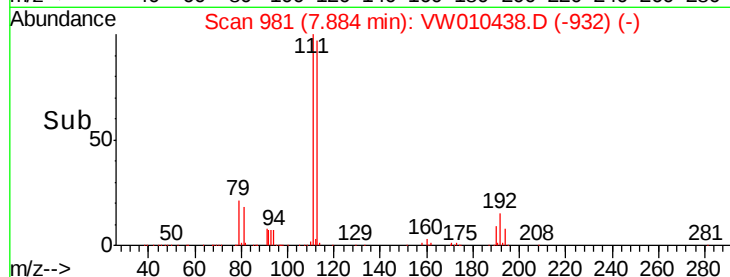
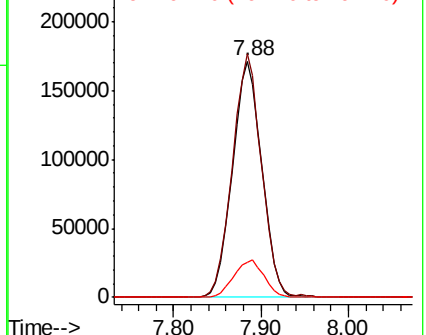
192 16.3 14.2 21.4



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.024 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

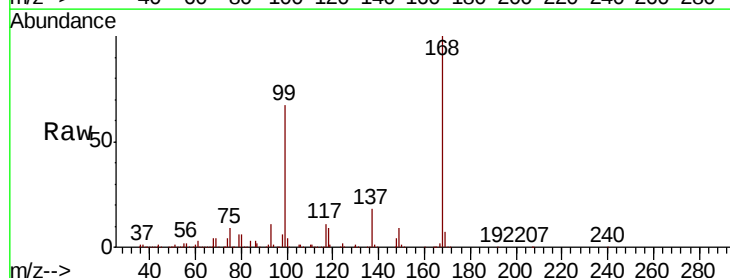
Tgt Ion: 75 Resp: 55545

Ion Ratio Lower Upper

75 100

110 10.3 19.4 58.1#

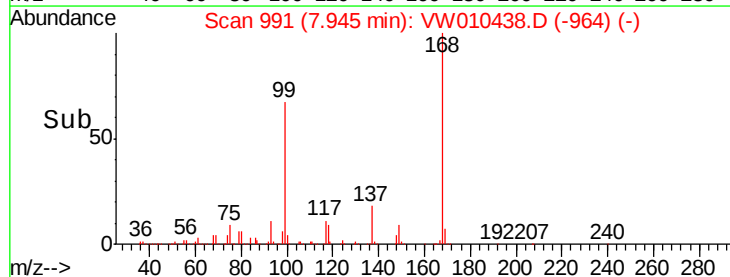
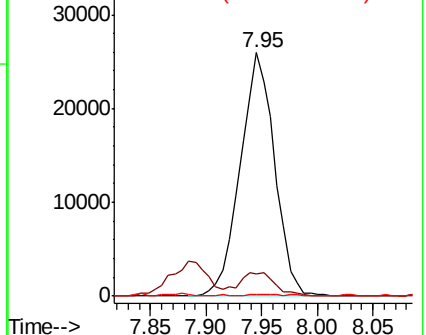
77 0.5 24.7 37.1#

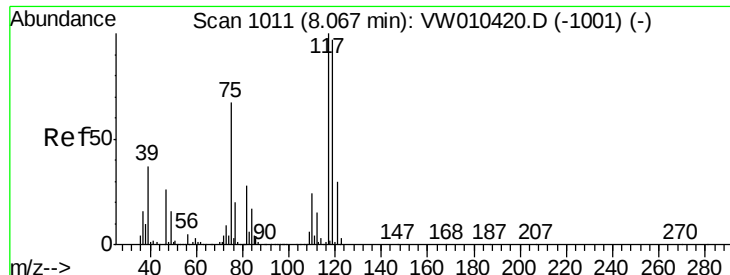


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW





#38

Carbon Tetrachloride

Concen: 5.942 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.12 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

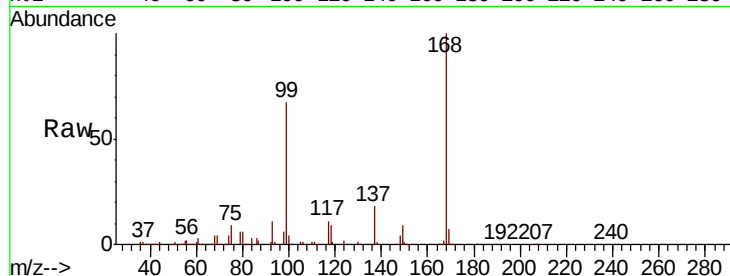
Tgt Ion:117 Resp: 70907

Ion Ratio Lower Upper

117 100

119 4.5 77.8 116.6#

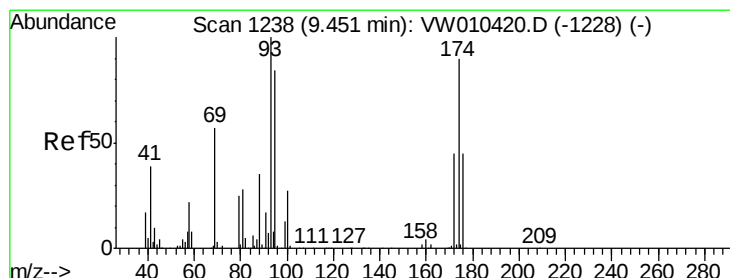
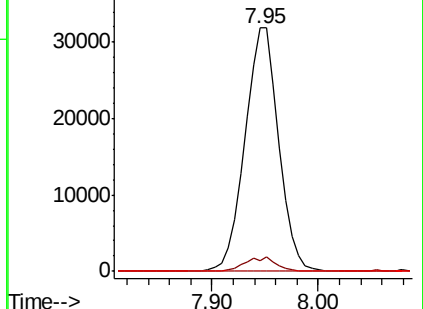
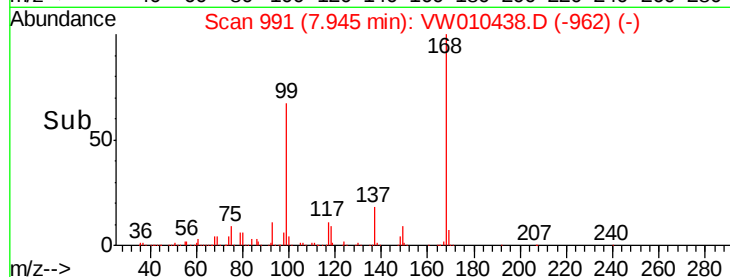
121 0.0 24.2 36.2#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#49

1,4-Dioxane

Concen: 1.273 ug/l

RT: 9.48 min Scan# 1242

Delta R.T. 0.02 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

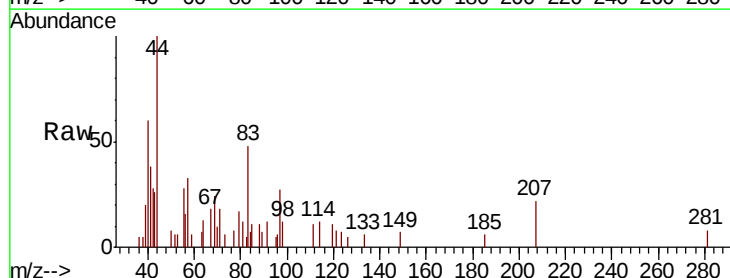
Tgt Ion: 88 Resp: 86

Ion Ratio Lower Upper

88 100

43 280.2 24.9 37.3#

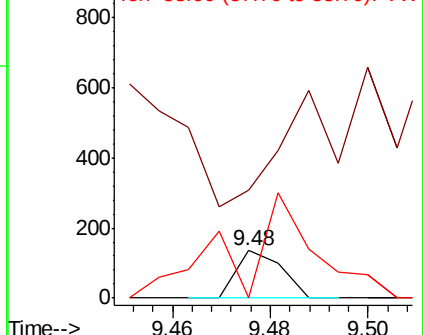
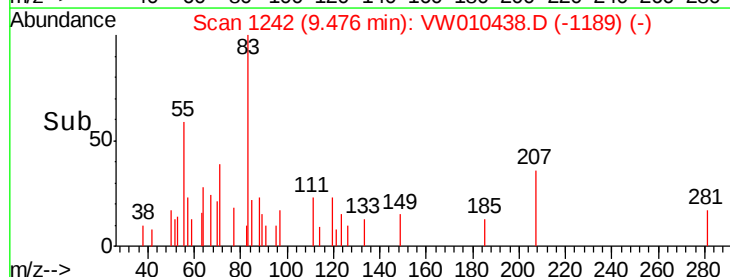
58 388.4 55.0 82.6#

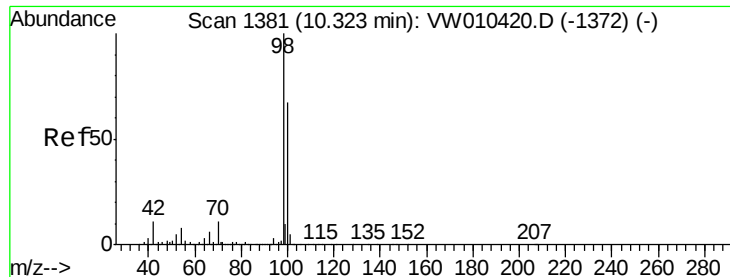


Abundance Ion 88.00 (87.70 to 88.70): VW

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW





#50

Toluene-d8

Concen: 53.009 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

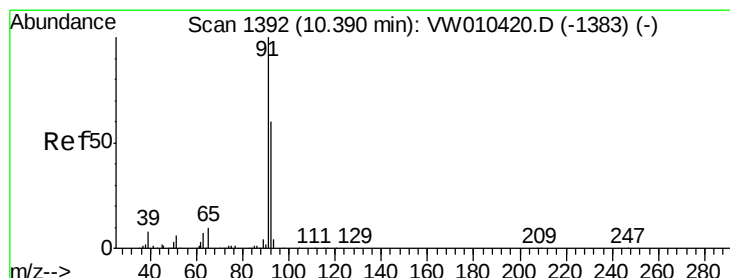
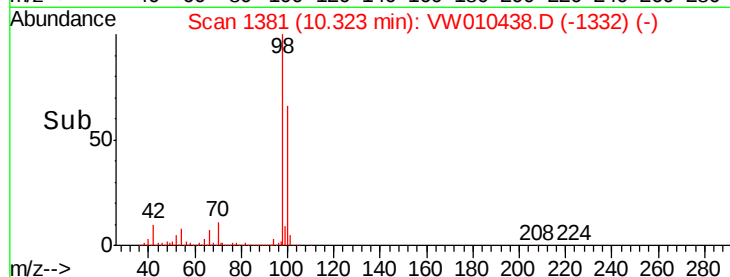
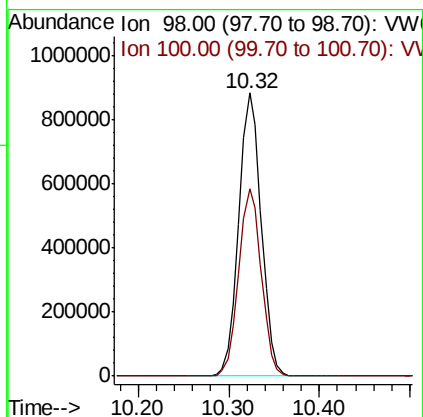
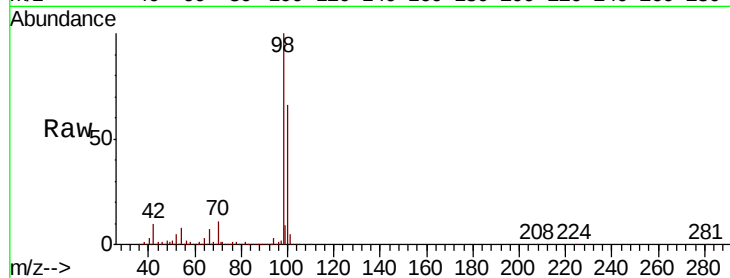
FESB-09(4-4.5)

Tgt Ion: 98 Resp: 1524850

Ion Ratio Lower Upper

98 100

100 66.6 53.3 79.9



#52

Toluene

Concen: 1.461 ug/l

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW010438.D

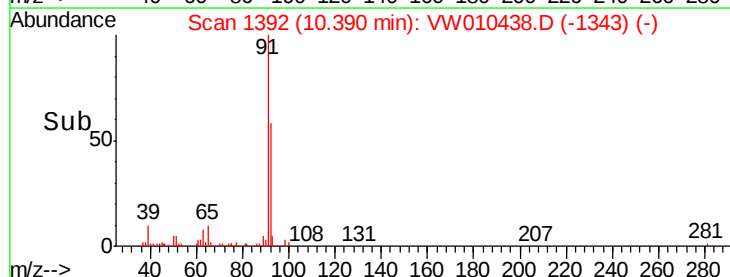
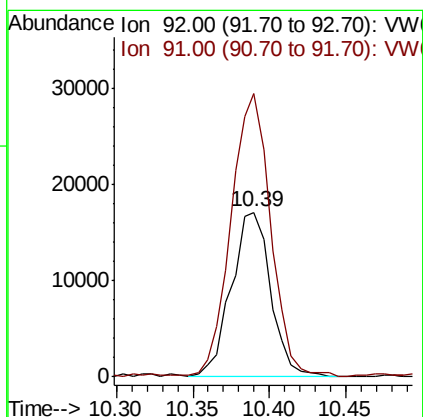
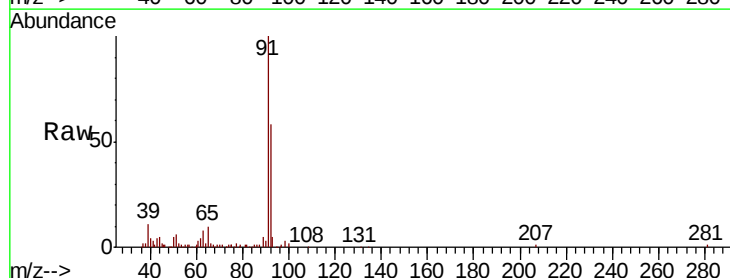
Acq: 18 May 2019 04:34

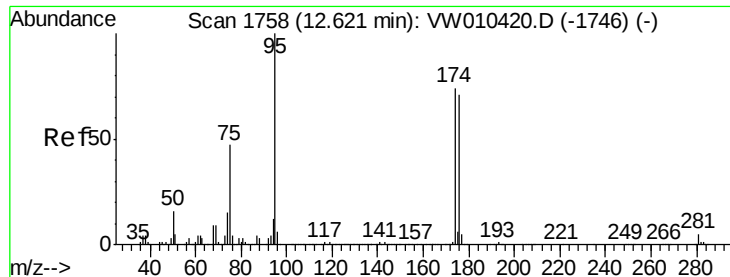
Tgt Ion: 92 Resp: 30612

Ion Ratio Lower Upper

92 100

91 171.0 135.4 203.0





#62

4-Bromofluorobenzene

Concen: 50.472 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

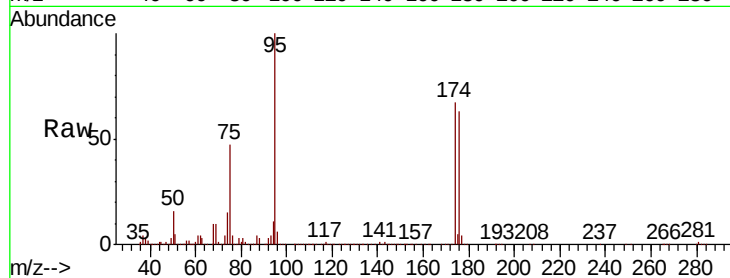
Tgt Ion: 95 Resp: 570016

Ion Ratio Lower Upper

95 100

174 66.0 0.0 146.6

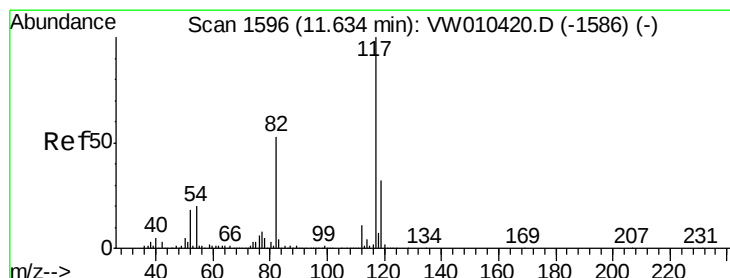
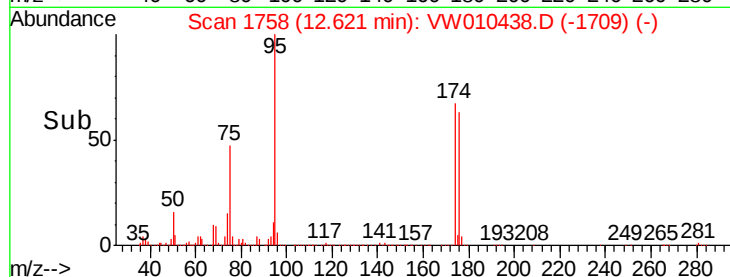
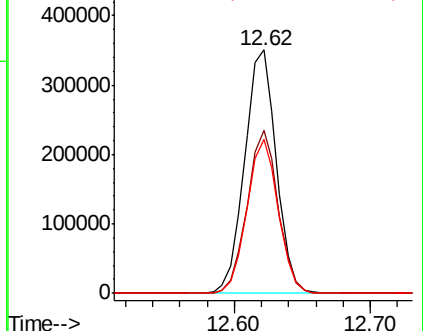
176 62.8 0.0 141.4



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1596

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

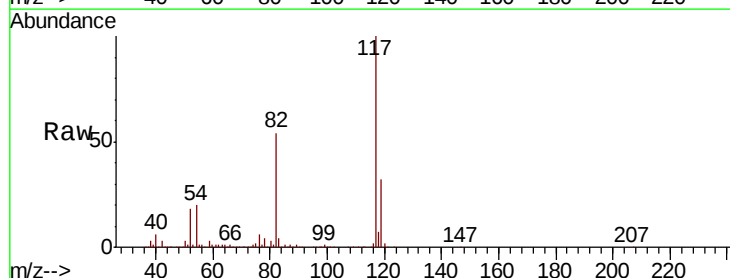
Tgt Ion: 117 Resp: 1095801

Ion Ratio Lower Upper

117 100

82 53.9 42.1 63.1

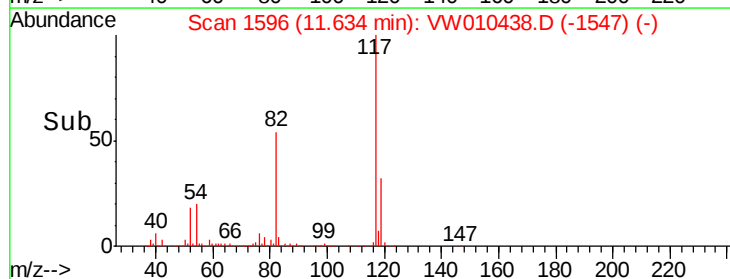
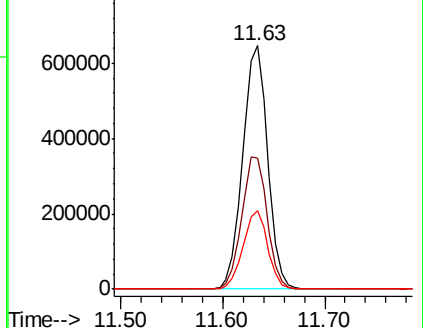
119 32.2 25.6 38.4

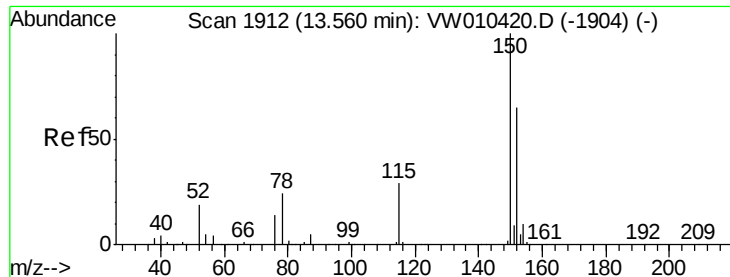


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

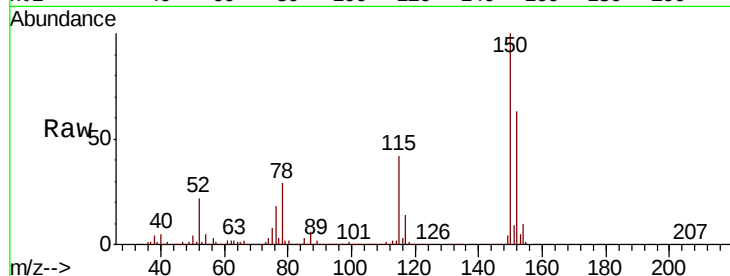
Tgt Ion:152 Resp: 463124

Ion Ratio Lower Upper

152 100

115 66.1 30.0 90.1

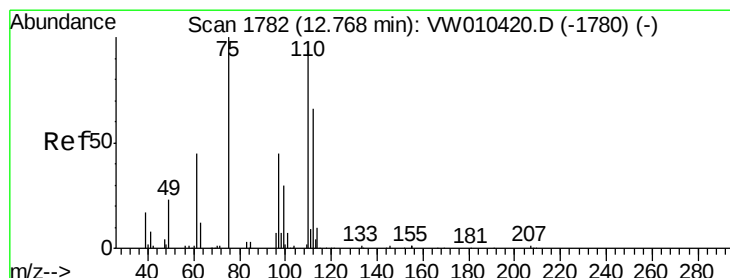
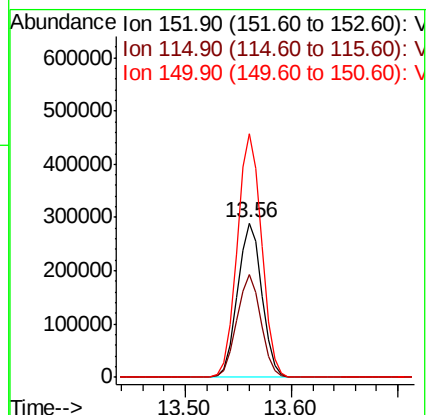
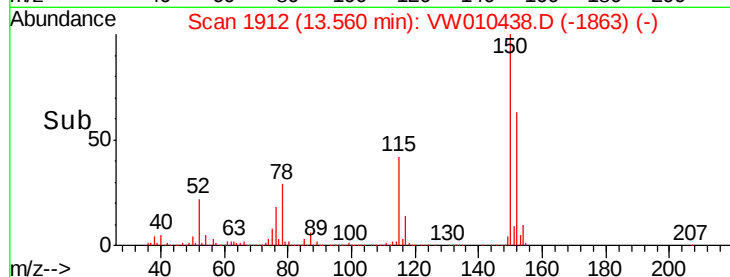
150 158.4 0.0 350.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 55.945 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW010438.D

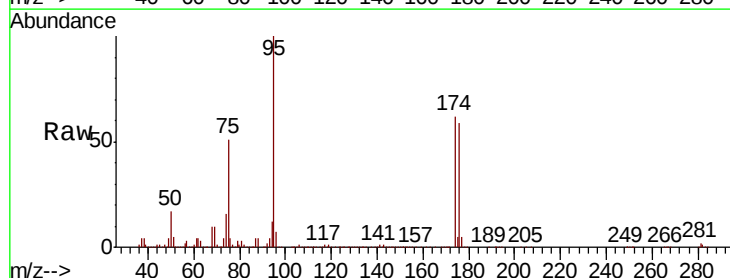
Acq: 18 May 2019 04:34

Tgt Ion: 75 Resp: 277446

Ion Ratio Lower Upper

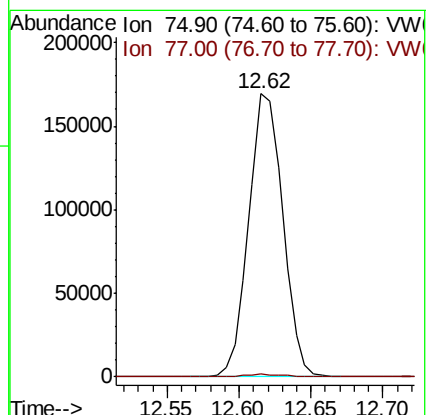
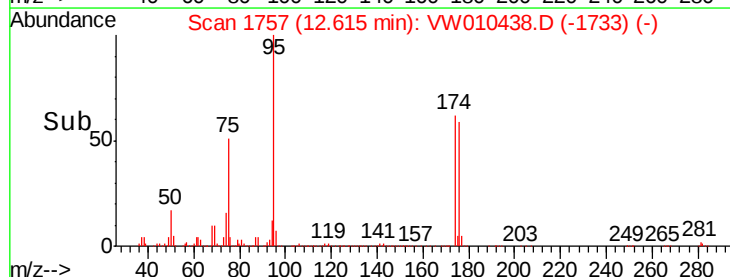
75 100

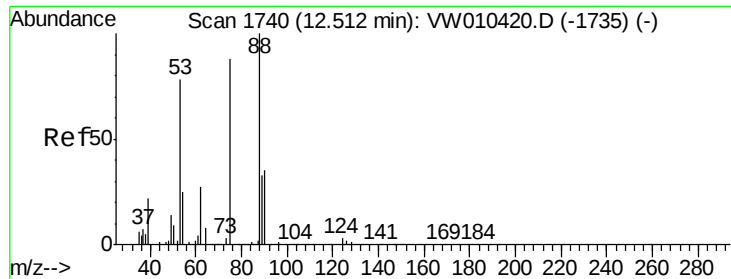
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 110.399 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW010438.D

Acq: 18 May 2019 04:34

Instrument :

MSVOA\_W

ClientSampleId :

FESB-09(4-4.5)

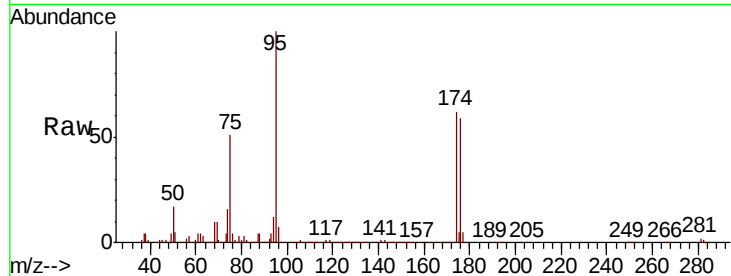
Tgt Ion: 75 Resp: 277446

Ion Ratio Lower Upper

75 100

53 0.1 70.7 106.1#

89 0.1 38.6 58.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

